



FC (£07000 / ROHS

USER'S MANUAL

10 METER RADIO

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■ FUNCTIONS & FEATURES

- 1. Big LCD displays frequency and all kinds of information
- 2. FM, AM, USB, LSB mode
- 3. Frequency Tuning Step 100Hz, 1KHz, 10KHz, 100KHz, 1MHz
- 4. ± 1.5KHz Clarifier
- 5. Flexiable menu function and PC programming software
- 6. ECHO Function
- 7. SQ, ASQ Function (FM and AM mode only)
- 8. RF GAIN Adjustment
- 9. RF PWR Adjustment
- 10. SCAN Function
- 11. Programmable RB Function
- 12. NB/ANL Function
- 13. DW DUAL-WATCH Function
- 14. BEEP Voice Prompt
- 15. +10KHZ Function
- 16. SWR, S/RF function
- 17. TOT function
- 18. HI-CUT Function
- 19. EMG CALL
- 20. SWR PROTECTION
- 21. Power Supply Voltage Protection
- 22. Key-Lock Function
- 23. Seven (7) Color LCD Display
- 24. Six(6) Groups Memory Channel
- 25. CTCSS/DCS Code(Optional)
- 26. DTMF Function

STANDARD ACCESSORIES



Radio



Microphone



Install bracket



Screws



Pads



Adjusting screws



Microphone Hanger



non-slip mat

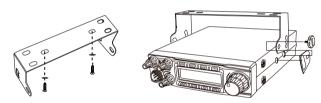


Fuse(15A 250V)

INSTALLLATON

Choose the most appropriate setting from a simple and practical point of view. Your radio should not interfere with the driver or crash the driver's knee or leg when rush brake.

- 1. Using the self-tapping screws and pads(2 sets) to fix the bracket.
- Put the Non-slip mat on the 2 ends of the bracket and put in the radio. Then insert the adjusting screws and check carefull each screws, make sure the screws and machine will not loose when the car shaking.
- Choose suitable angle by the 3 screw holes in the two ends of bracket.

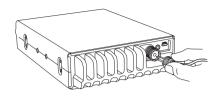


★ ANTENNA INSTALLATION

Before using this radio, please install a high efficent and harmonious adjusted CB antenna, suitable antenna type and correct installation will bring excellent communication.

To match with the radio, the antenna and cable shall with characteristic impedance of 50ohm, or the antenna system will not efficient enough and will disturb TV, radio or other electronics.

- 1. Screw the antenna connector into the antenna jack.
- Grounding the antenna system to ensure best performance of this radio.



WARNING.

- ▲ Connect antenna firstly before transmiting, or it might damage the radio.
- ▲ To avoid the risk of fire, electric shock, radio damage, all base station shall equip of lightning protector
- ▲ Be sure choose a matching antenna, you may enquiry our dealers.
- 3. The position of antenna can be put as following example:



■ POWER CONNECTION

This radio adopt 13.8V power supply, never connect it to 24V battery, And the 13.8V car battery shall with sufficient current, or the LCD will become dark and Transmit power will drop down.

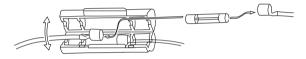
- 1. Connect positive red power cable with the + terminal of the battery.
- Connect negative black power cable with the terminal of the battery.
- ▲ We suggest not use cigar lighter as it often bring down the voltage.
- ▲ Locate the power cable away from high temperature, moisture, portfire and cable insulator.
- ▲ Use a full power cable even it is longer than need, do not take off the fuse holder from the cable.

Replacing Fuse

This radio adopt 15A, 250V fuse.

If the fuse blows, determine the reason, then correct the problem. After the problem is resolved, replace the fuse. If newly installed fuses continue to blow, disconnect the power cable and contact your authorized dealer or an authorized servicecenter.

- 1. Pull the two fuse cover in difference direction and open it.
- 2. Replace the broke fuse with good one, and close the fuse holder.
- 3. Be sure to use suggested fuse, or it might damage the radio.



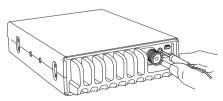
Install Microphone Hanger

Choose a ideal location which will not interfere the driver. Using supplied self-tapping screws and pads(2 sets) to fix the hanger

Install External Speaker

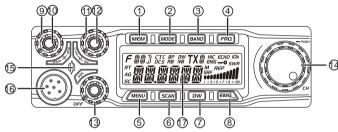
If use an external speaker, please choose 8 ohm speaker with 3.5mm mono band (doulbe cable) plug.

- 1. Locate the external speaker in a suitable place.
- 2. Plug into the speaker jack.



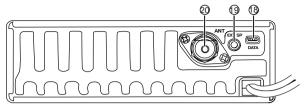
■ GETTING ACQUAINTED

Front Panel



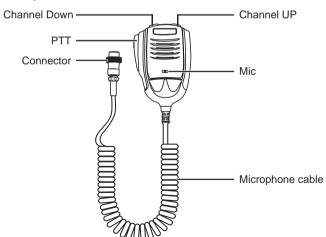
No.	Key	Functions	
1	MEM	Use, store or delete memory channel	
2	MODE	Switch mode: FM、AM、USB、LSB、PA	
3	BAND	Switch band: A-I	
4	FRQ	Switch between channel mode and frequency mode	
5	MENU	Function Menu key	
6	SCAN	Scan, Scan add, Scan delete	
7	DW	Dual-watch scan, Dual-watch setup	
8	EMG	Emergy Channel; Keypad lock.	
9	PWR	RF Power Control	
10	RFG	RF Gain Control	
11	SQ	Squelch Control	
12	CLAR	SSB Clarifier switch	
13	VOL/OFF	Power On/Off; Volume Control.	
14	CH	Channel Switch, Push key.	
15		RX/TX Indicator	
16		Microphone Jack	
17		LCD Display	

※ Rear Panel

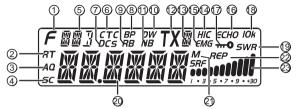


18	PC Cable Jack
19	External Speaker Jack
20	Antenna Jack

* Microphone



★ LCD Display



1	F	Appears when press MENU key.	
2	RT	Appears when adjust SSB clarifier frequency.	
3	AQ	Appears when use ASQ.	
4	5C	Appears during scan function.	
5		Indication of working mode.	
6	СТС	Appears when set with CTCSS code.	
7	DC5	Appears when set with DCS code.	
8	BP	Appears when Beep voice is ON.	
9	RB	Appears when RB function is ON.	
10	DW	Appears when Dual-watch function is ON.	
11	NB	Appears when adjust Noise Blanker is ON.	
12	TX	Appears during transmiting.	
13		Indiation of working band.	
14	HIC	Appears when Hi-cut function is ON.	
15	EMG	Appears when using Emergency channel.	
16	<i>ЕСНО</i>	Appears when Echo function is ON.	
17	 0	Appears when the Keypad lock function is ON.	
18	IOk	Appears when +10Khz function is ON.	
19	<i>SWR</i>	Indication of SWR level.	
20		Display of frequency and channel.	
21	М	Appears when using memory channels	
22	REP	Appears when repeater function is ON.	
23	SRF ••••••••••••••••••••••••••••••••••••	Display of TX/RX Signal strength.	

AnyTone

■ HOW TO USE YOUR RADIO

※ OFF/ON Radio

- Turn VOL clockwise to switch on the radio, the radio emit a beep.
 When the LCD displays frequency or channel, the radio is on.
- Turn VOL anti-clockwise to switch off the radio, the radio is OFF. when hear Ka Ta from the switch.

★ Volume Control

When the radio is turned on, turn VOL clockwise will increase the volume, turn VOL anti-clockwise will reduce the volume. The LCD displays VOL: XX (XX stands for the volume level, total 1-36 levels).

Note: Adjust the volume during communication to get suitable level.

* RF Power Control

When the radio is transmitting, turn PWR outer shaft to adjust power Turn it clockwise to increase power, anti-clockwise to reduce power.

RF Gain Control

When the radio is receiving, turn RFG inner shaft to adjust RF gain Turn it clockwise to increase gain, anti-clockwise to reduce gain.

* SQUELCH Control

When the radio is standby, turn SQ outter shaft clockwise to adjust squelch level. The LCD displays SQ: XX. (XX stands for the squelch level, total 1-36 levels).

※ SSB Clarifier control

When the radio is transmitting or receiving, turn CLAR inner shaft to adjust USB/LSB TX or RX frequency. Turn it clockwise to increase frequency, anti-clockwise to reduce frequency.

★ Channel Selection

When radio in channel mode, turn channel knob to select desired channel. Clockwise to increase, anti-clockwise to reduce channel.

Note: In channel display mode, each press [PUSH] key will increase the frequency by 10 times of channel step size.

★ Frequency control

- In frequency mode, press [PUSH] key, then you can adjust frequency for present channel.
- When the frequency is flashing, turn CH clockwise to increase frequency, anti-clockwise to reduce frequency.
- When the frequency is flashing, press [PUSH] again to adjust frequency step size.

KEYPAD FUNCTION

☀【MEM】

Using memory channel:

- Short press [MEM] to enter memory channel, turn CH to choose memory channel.M1-M6, Total 6 memory channels.
- 2. Short press [MEM] again to exit memory channel mode.

Store/Delete memory channel:

1. Store memory channel:

When the radio is not in memory channel mode, choose the channel to be stored, and hold [MEM] enter storage mode, the channel number flashes, Turn Channel switch to choose the location to be stored (M1-M6), then hold [MEM] until the flashing channel number disappear, the storage is done.

2. Delete memory channel:

In channel mode, hold [MEM] for over 2 seconds, the memory channel number flashes, turn the CH switch to choose the memory to be deleted. Then hold [MEM] until the flashing channel number disappear, the delete is done.

★【MODE】

Short press [MODE] to choose mode FM-AM-USB-LSB-PA.

☀【BAND】

Short press [BAND] to choose band A-B-C-D-E-F-G-H-I.

※【FRQ】

Short press [FRQ] to switch between frequency display mode and channel display mode.

☀【MENU】

- Short press [MENU] , the top left of LCD display "F", Press [PUSH] to enter channel function menu list.
- Long press [MENU] for 2 seconds to enter Background Function menu.

☀【SCAN】

Scan function

- Short press [SCAN] to start scan function, "SC" flashes in the LCD.
- In scan mode, Turn Channel switch will change scan direction.
- 3. Short press [SCAN] again to exit scan.

Add/delete scan list

In channel mode, Long press [SCAN] for over 2 seconds will add or delete present channel from scan list.

- 1. When LCD displays "SC", present channel added to scan list.
- When LCD does not displays "SC", present channel is not added to scan list.

Note: This function is equal the operation in Channel data function No.05 menu.

* [DW]

Dual-Watch function

- 1. Short press [DW] to turn on Dual watch, LCD displays "DW";
- 2. Short press [DW] again or press PTT to exit DW mode;

Dual-Watch channel setup

- 1. Choose first Dual-Watch channel.
- 2. Hold [DW] for 2 seconds, LCD displays "DW";
- Turn Channel switch to choose second dual watch channel. Long press DW again to store and exit.

⋇【EMG】

Choose EMG channel:

Short press [EMG] to use Emergency channel, LCD displays "EMG".

- 1. Short press [EMG] once to choose CH9;
- 2. Short press [EMG] again to choose CH19;
- 3. Short press [EMG] thrice to return to last normal channel.

Keypad Lock Function:

- 1. Long press [EMG] to lock keys, LCD displays " --- ";
- 2. Long press [EMG] again to unlock the keys.

Note: When this function is turned on, only PTT button is valid.

CHANNEL FUNCTION MENU OPERATION

- Press [MENU] , the top left of LCD display "F", Press [PUSH] to enter menu list.
- 2. Turn Channel switch to find No.1- No.5 menus.
- 3. Press [PUSH] to choose the menu.
- 4. Turn Channel switch to choose wanted value.
- Press [PUSH] to return to previous menu, press any other key or wait 5 seconds, the setting will be stored and exit.

No.	Function	LCD Display	Values and Descriptions
1	Busy Channel Lockout	20	OFF: Shut busy channel lockout function; ON: Open busy channel lockout function; Default: OFF.
2	Offset Direction	REP	REP+: Open offset direction function, TX frequency> RX frequency; REP-: Open offset direction function, RX frequency> TX frequency; OFF: Shut offset direction function Default: OFF.
3	CTCSS/DCS	03 F SO 1	CTCSS: 67.0~250.3Hz, Total 38 groups; DCS: D023N~D754N, Total 104 groups; OFF: Shut CTCSS/DCS code function. Default: OFF Note: This function is available only when install Optional CTC board.

4	Add/delete Scan list	E STAN SE	ADD: LCD displays "SC", present channel is added to scan list. DEL: LCD does not display "SC", present channel is not added to scan list. Default: OFF
5	Public Data	05 ° w 1	OFF: Choose independent channel menu; ON: Choose public channel menu; Default: ON Note: If choose OFF, The hidden channel menu 6-11 will appear. This 6 menus are same as the 6 menus in Public data menus.

Note: Channel funciton menu is used to edit the setting for current channel.

PUBLIC DATA FUNCTION MENU OPERATION

- 1. Hold [PUSH] for 2 seconds to enter menu list;
- 2. Turn Channel switch to find menu 1-6.
- 3. Press [PUSH] to choose the menu;
- 4. Turn channel switch to choose wanted value.
- Press [PUSH] to return to previous menu, press any other key or wait 5 seconds, the setting will be stored and exit.

No.	Function	LCD Display	Values and Descriptions
1	Hi-cut	AG H T SRP	OFF: Shut HI-CUT function; ON: Open HI-CUT function; Default : OFF.

No.	Function	LCD Display	Values and Descriptions
2	NB/ANL	AO N SPE	OFF: Shut NB/ANL function; ON: Open NB/ANL function; Default : ON.
3	ECHO	03 ar ng 1 Ao E [] 587 SC E [] 587	OFF: Shut ECHO function; ON: Open ECHO function; Default : OFF
4	10KHz	04 ** ¥ 11KHZ ***	OFF: Shut +10KHz function; ON: Open +10KHz function; Default: OFF
5	ROGER	25 F. T.	OFF- 5, Total 6 groups. Default: OFF,Off means shut off Roger.
6	DTMF PTT ID	05 ° 3 I 4 ITMF 36	BOT: Press PTT to send DTMF encode; EOT: Release PTT to send DTMF encode; CALL: Hold PTT+EMG to send DTMF encode; Note: If the M1-M16 storage has no PTT ID, DTMF function is defaulted OFF. users able to choose the DTMF group only

LCD Disculant

Note: Public function menu offer one-time setting for all channels.

when programmed with code

BACKGROUND FUNCTION MENU OPERATION

- 1. Hold [MENU] for 2 seconds to enter menu list;
- 2. Turn Channel switch to ind menu No.1 to No.15;
- 3. Press [PUSH] to choose the menu;
- 4. Turn channel switch to choose wanted value:
- Press [PUSH] to return to previous menu, press any other key or wait 5 seconds, the setting will be stored and exit.

No.	Function	LCD Display	Values and Descriptions
1	BEEP	AO JEFF SSS	OFF: Shut BEEP function; ON: Open BEEP function; Default: ON.
2	LCD display in TX mode		OFF: Displays TX frequency when TX; SWR: Displays SWR value when TX TOT: displays TOT remain time when TX; DC: Displays voltage when TX; Default: OFF.
3	Mic Gain	AG N T SRP SC 1 1 1 5RP (**) **(**) **(**)	1-36, Total 36 levels available. Default: 30.
4	Monitor Gain	AG N SRF (**) SRF (**	1-32, OFF, Total 33 levels available; Default: OFF (Shut NOG function)
5	тот	## 15 ## 15	1-600s, OFF, Total 10minutes available; Default: 180S (Shut TOT function)
6	SWR Protection	AD SSE	OFF: Shut SWR function; ON: Open SWR function; Default: ON

No.	Function	LCD Display	Values and Descriptions
7	Voltage Protection	TILL SE	OFF: Shut voltage protection function; ON: Open voltage protection function; Default: ON
8	Scan Type	08 ** // I	SQ: SQ scan function; TI: Time scan function; Default: SQ
9	Clarifier	BS F. IN SW	OFF: Shut frequency adjustment R: Open RX frequency adjustment; T: Open TX frequency adjustment; RT: Open TX/RX frequency adjustment; Default: R
10	Backight	10	WHITE,BLUE,GREEEN, YELLOW, RED,PURPLE,CYAN Default: WHITE
11	REP frequency	MATY PEP SOC	Frequency Range: 100Hz-5MHz Default: 100KHz
12	Channel Switch Setup	12 ** so I	CHAN: Choose to adjust channel FREQ: Choose to adjust frequency Default: FREQ
13	ASQ level	13 ** na I sc	01-09, total 9 level available Default: 05

14	DTMF Encode	14 " no I M ITM F. ser	S TIME: DTMF transmit time; FDELAY: First digital time; C TIME: Pre-carrier time; *#IME: **and # delay time; D CODE: D code setting time; TX DIS: Display setting for DTMF transmit; MEM: DTMF encode storage list; Note: In the DTMF encode storag -e list (M1-M16), press PUSH to edit DTMF code, then turn chan -nel knob to choose desired value press PUSH again to edit next list, after finish setting, hold PUSH to store it and back to main menu.
15	Reset	15 T	OPT: All function setup resume default; ALL: All channels and setup resume default; Default: OPT

SPECIFICATIONS

GENERAL			
Frequency Range	28.000-29.700MHz		
Frequency Band	A/B/C/D/E/F/G/H/I		
Channel	40channels(programmable)in each band		
Frequency Control	Phase-Locked-Loop Synthesizer		
Frequency Step	100Hz、1KHz、10KHz、100KHz、1MHz		
Frequency Tolerance	± 5.0 ppm		
Temperature Range	-20°Cto +50°C		
Microphone	with push-to-talk /UP/DN and coiled cord		
Input Voltage	13.8V		
Dimensions (in mm)	245(L) x 158(W) x 48(H)		
Weight	1.5kg		
Antenna Connector	UHF, SO239		
TRANSMITTER			
Power Output	AM: 15W / FM:45W / SSB: 60W(PEP)		
Drain	12A(with modulation)		
Modulation	FM/AM/USB/LSB		
Inter-modulation Distortion	SSB: 3rd order, more than -25dB; 5th order, more than -35dB		
SSB Carrier Suppression	55dB		
Unwanted Sideband	50dB		
Frequency Response	AM/FM: 300 to 3000Hz SSB: 450 to 2500Hz		
Output Impedance	50ohms, unbalanced		

RECEIVER	
Sensitivity	SSB: 0.25µV for 10dB(S+N)/N AM:1.0µV for 10dB(S+N)/N FM: 1.0µV for 20 dB (S+N)/N (All at greater than 1/2 watt of audio output)
Adjacent-Channel Selectivity	AM/FM: 60dB SSB: 70dB
Image Rejection	More than 65dB
IF Frequency	AM/FM: 10.695MHz 1st IF, 455KHz 2nd IF SSB: 10.695MHz
RF Gain Control	45dB adjustable for optimum signal reception
Automatic Gain Control(AGC)	Less than 10dB change in audio output for inputs from 10 to 100,000 microvolt.
Squelch	Adjustable; threshold less than 1.0μV. Automatic Squelch Control(only AM/FM)1.0μV
Audio Output Power	3 watts into 8 ohms
Frequency Response	AM/FM: 300 to 3000Hz SSB: 450 to 2500Hz
Built-in Speaker	8 ohms, round.
External Speaker(Not Supplied)	8 ohms; disables internal speaker when connected.



WARNING

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device does not cause any harmful interference; and (2) this radio must accept any interference that may cause undesired operations.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Licensing Information

Use our radio in USA is subject to the rules & regulations of FCC. Changes or modifications not expressly approved by our may void the user authority granted by the FCC to operate this radio and should not be made. To comply with FCC requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter maintenance and repairs in the private land mobile and fixed services as certified by an organization representative of the user of those services. Replacement of any transmitter component (crystal, semiconductor, etc) not authorized by the FCC equipment authorization for this radio could violate FCC rules.

Note: Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited.

Important: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device. Your radio is set up to transmit a regulated signal on an assigned frequency. It is against the law to alter or adjust the settings inside the radio to exceed those limitations. Any adjustments to your radio must be made by qualified technicians.

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.



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